

Rabbit anti-Mouse, Rat Rad17 Polyclonal Antibody | anti-Rad17 antibody

Anti-Rad17 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125638	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Rad17; Polyclonal Antibody; Anti-Rad17 Antibody; Cell cycle checkpoint protein RAD17; RAD17 checkpoint clamp loader component; anti-Rad17 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Rad17 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-Rad17 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived mouse Rad17 recombinant protein (Position: M1-Q267).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of mouse spleen tissues using anti-Rad17 antibody (AAA125638). Overlay histogram showing mouse spleen tissues stained with AAA125638 (Blue line). The tissues were blocked with 10% normal goat serum. And then incubated with rabbit anti-Rad17 Antibody (AAA125638, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



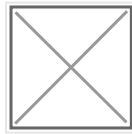
FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of HEPA1-6 cells using anti-Rad17 antibody (AAA125638). Overlay histogram showing HEPA1-6 cells stained with AAA125638 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Rad17 Antibody (AAA125638, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



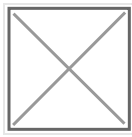
IHC (Immunohistochemisry)

Figure 3. IHC analysis of Rad17 using anti-Rad17 antibody (AAA125638).Rad17 was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1μg/ml rabbit anti-Rad17 Antibody (AAA125638) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Rad17 using anti-Rad17 antibody (AAA125638).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: mouse heart tissue lysatesLane 2: mouse NIH/3T3 whole cell lysatesLane 3: rat heart tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-Rad17 antigen affinity purified polyclonal antibody (Catalog # AAA125638) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Rad17 at approximately 77KD. The expected band size for Rad17 is at 77KD.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of Rad17 using anti-Rad17 antibody (AAA125638).Rad17 was detected in paraffin-embedded section of mouse Peyer's patches tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1μg/ml rabbit anti-Rad17 Antibody (AAA125638) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-Rad17 antibody	The protein encoded by this gene is highly similar to the gene product of Schizosaccharomyces pombe rad17, a cell cycle checkpoint gene required for cell cycle arrest and DNA damage repair in response to DNA damage. This protein shares strong similarity with DNA replication factor C (RFC), and can form a complex with RFCs. This protein binds to chromatin prior to DNA damage and is phosphorylated by the checkpoint kinase ATR following damage. This protein recruits the RAD1-RAD9-HUS1 checkpoint protein complex onto chromatin after DNA damage, which may be required for its phosphorylation. The phosphorylation of this protein is required for the DNA-damage-induced cell cycle G2 arrest, and is thought to be a critical early event during checkpoint signaling in DNA-damaged cells. Multiple alternatively spliced transcript variants of this gene, which encode four distinct protein isoforms, have been reported. Two pseudogenes, located on chromosomes 7 and 13, have been identified.
References	1. Bao, S., Shen, X., Shen, K., Liu, Y., Wang, X. -F. The mammalian Rad24 homologous to yeast Saccharomyces cerevisiae Rad24 and Schizosaccharomyces pombe Rad17 is involved in DNA damage checkpoint. Cell Growth Diff. 9: 961-967, 1998. 2. Bao, S., Tibbetts, R. S., Brumbaugh, K. M., Fang, Y., Richardson, D. A., Ali, A., Chen, S. M., Abraham, R. T., Wang, X. -F. ATR/ATM-mediated phosphorylation of human Rad17 is required for genotoxic stress responses. Nature 411: 969-974, 2001. 3. Bluysen, H. A. R., Naus, N. C., van Os, R. I., Jaspers, I., Hoeijmakers, J. H. J., de Klein, A. Human and mouse homologues of the Schizosaccharomyces pombe rad17+ cell cycle checkpoint control gene. Genomics 55: 219-228, 1999.

NCBI AND UNIPROT INFORMATION

NCBI GI #	113199779
NCBI GeneID	19356
NCBI Accession #	NP_001037836.1
NCBI GenBank Nucleotide #	NM_001044371.2
UniProt Accession #	Q6NXW6 ; O88934 ; O89024

Molecular Weight	77,391 Da
NCBI Official Full Name	cell cycle checkpoint protein RAD17 isoform 1
NCBI Official Synonym Full Names	RAD17 homolog (S. pombe)
NCBI Official Symbol	Rad17
NCBI Official Synonym Symbols	MmRad24
NCBI Protein Information	cell cycle checkpoint protein RAD17
UniProt Protein Name	Cell cycle checkpoint protein RAD17
UniProt Gene Name	Rad17
UniProt Entry Name	RAD17_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/rad17-antibody-direct-elisa-flow-cytometry-immunohistochemistry-western-blot-elisa/125638>